

10900-B Stonelake Boulevard, Suite 126 · Austin, Texas 78759 U.S.A. Phone: +1-512-498-9434 (WIFI) · Fax: +1-512-498-9435 www.wi-fi.org

Via Electronic Filing

November 6, 2019

Marlene Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: Ex Parte Communication

ET Docket No. 18-295: Unlicensed Use of the 6 GHz Band;

GN Docket No. 17-183: Expanding Flexible Use of Mid-Band Spectrum Between 3.7 GHz and 24 GHz; and

<u>IB Docket No. 16-185</u>: 2019 World Radiocommunication Conference Advisory Committee

Dear Ms. Dortch:

On November 4, Edgar Figueroa, President and CEO of Wi-Fi Alliance, Russell Fox of Mintz, and I spoke by telephone with Chairman Pai regarding the above-referenced proceedings.

We noted that smartphones, the Internet of Things, and other wireless technologies have transformed Wi-Fi from being complementary to broadband access to being a vital component of the telecommunications infrastructure. The Wi-Fi industry is meeting the challenge by investing billions of dollars in advancing Wi-Fi technology, including by introducing Wi-Fi 6, the latest generation of Wi-Fi, in September. Significant enhancements and innovation in Wi-Fi connectivity will become available through the use of 160 megahertz wide channels. That, coupled with the ever-increasing congestion in currently-available unlicensed spectrum, is why Commission action in this proceeding, making the 5925-7125 MHz (the "6 GHz") band available for Wi-Fi, is so important.

We pointed out that technical evidence on the record demonstrates that low power indoor ("LPI") and very low power ("VLP")^{1/} devices do not pose a risk of interference to incumbent 6

1/

LPI devices address the majority of the consumer segment, and are deployed singly or in very small groups, exclusively indoors. VLP devices address short-range, high-bandwidth scenarios like Fifth Generation wireless gigabit mobile tethering (including automotive use cases), as well as new "last meter" applications like augmented reality, virtual reality, Internet of Things, and direct peer-to-peer connections.

GHz operations. ^{2/} We therefore urged that the Commission not mandate the use of automatic frequency coordination ("AFC") for *all* 6 GHz unlicensed use cases, because that will result in two negative consequences. *First*, imposing an AFC requirement across all use cases will delay or even preclude much of the use of the 6 GHz band, meaning that the FCC will not have provided any meaningful relief from today's spectrum congestion nor enabled Wi-Fi innovation. It will take years for AFCs to be developed, tested and certified – just like was seen with the current spectrum access system ("SAS") in the 3.5 GHz band. And, the applications where AFC is not required – LPI and VLP applications – are the very applications where spectrum congestion is most severe and relief is most urgent. *Second*, the cost and complexity of implementing AFC capabilities will undermine commercial viability of many price-sensitive consumer-grade devices. That is why Wi-Fi Alliance urges a more nuanced approach based on a combination of power limits and operational restrictions, limiting AFC to only those use cases where it is required.

Finally, we commended the efforts of the Commission's staff at the ongoing 2019 World Radiocommunication Conference and reiterated the Wi-Fi industry's concerns with efforts by other countries to identify the 6 GHz band for International Mobile Telecommunication use.

* * * *

Pursuant to Section 1.106 of the Commission's rules, a copy of this letter has been submitted in the record of the above referenced proceedings and a copy has been provided to Chairman Pai. If there are any questions regarding the foregoing, please contact the undersigned.

Respectfully submitted,

/s/ Alex Roytblat

WI-FI ALLIANCE

Alex Roytblat Senior Director of Regulatory Affairs

aroytblat@wi-fi.org

cc: Hon. Ajit V. Pai

_

See, e.g., Reply Comments of Wi-Fi Alliance, ET Docket No. 18-295 at 9-16 (filed Mar. 18, 2019).